

WILLIAM M. CAVAGE: **Project Manager, Fuel Tank Safety**
FAA/DOT AAR-422, Fire Safety R&D

EDUCATION: **Master of Science in Aerospace Engineering (1992)**
Bachelor of Science in Aerospace Engineering (1992)
West Virginia University,

CAREER SUMMARY:

Mr. Cavage is an engineer and researcher with over 8 years experience in the fields of fluid dynamics, aircraft safety, systems analysis fuel tank inerting. Mr. Cavage studied experimental turbulent fluid dynamics in college where he did research in the fields of Laser Doppler Anemometry of turbulent jets and ground vortex formation. Mr. Cavage has done extensive work in data reduction and analysis and has integrated data acquisition systems (DAS) in multiple platforms for lab, ground vehicle, and flight testing applications. Mr. Cavage has experience in digital filtering, pulse code modulating, and digital signal processing (DSP) and has programmed for DAS, DSP, and data analysis on multiple platforms. Mr. Cavage performed system safety analysis on the V-22 program for two years where he was responsible for electrical and wiring sub-system safety as well as multi-mode radar and terrain following (TF) flight mode safety analysis. Mr. Cavage presently leads the research efforts into fuel tank safety and ground-based inerting in the Fire Safety Program at the FAA Technical Center in Atlantic City, NJ.

Mr. Cavage is a Senior Member and Journalized Author in the AIAA and is a member of the Aerospace Engineering honorary Sigma Gamma Tau. He is listed in Who's Who in Science and Engineering and has spoke at several conferences including the SAE Advances in Aviation Safety.

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LIST OF PUBLICATIONS:

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Cavage, W. M., "The cost of Implementing Ground-Based Inerting in the Commercial Fleet," FAA Technical Report, DOT/FAA/AR-00/19, May 2000.

Cavage, W. M., "Heating Comparison of Radial and Bias-Ply Tires on a B-727 Aircraft," FAA Technical Note, DOT/FAA/AR-TN97/50, November 1997.

Cavage, W. M., and Magee, D. A., "Wind Tunnel Testing of an Aircraft Model with a Fuselage Breach: Data Analysis Report," GSC Report, GSC-96SV/007, September 1996.

Barnes, T. J., Cavage, W. M., and DeFiore, T., An Analysis of Ground-Flight Loads Measured on the Instrumented B-727 N40. FAA Technical Report, AR-95/82, October 1995.

Kuhlman, J. M., and Cavage, W. M., "Ground Vortex Formation for Uniform and Nonuniform Jets Impinging on a Ground Plane," Journal of Aircraft, Vol. 31, No. 4, July-August 1994.

Cavage, W. M., and Kuhlman, J. M., The Ground Vortex Flow Field Associated With a Jet in a Cross Flow Impinging on a Ground Plane for Uniform and Annular Turbulent Axisymmetric Jets. NASA Contract Report, CR-4513, May 1993.

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Cavage, W. M., "Analysis of Ground Vortex Formation for Regular and Annular Turbulent Axisymmetric Jets," Paper presented at AIAA Eastern Regional Student Conference, Penn State University, April 1992.

Wilson, A., and Cavage, W. M., "Structural Tests of Aircraft Window Assembly Equipped with Smoke Evacuation Valve," FAA Technical Note, DOT/FAA/CT-TN89/44, September 1990.